

**Claims:**

1. A system comprising:
  - a service processor controlled by operating software;
  - a plurality of system resources controlled by said service processor;
  - an uninterruptible power supply (UPS) connected to at least one system resource; and
    - a memory for storing a configuration file that lists said plurality of system resources and said UPS;
    - wherein said service processor uses said configuration file to determine what system resources are connected to said UPS.
2. A system according to claim 1, wherein said at least one system resource includes redundant first and second power supplies, and wherein said service processor initiates a warning if said UPS connects to both said first and second power supplies.
3. A system according to claim 2, further including a first AC power line and a second AC power line, wherein said UPS is powered by said first AC power line; wherein said configuration file lists operative connections between said first and second power supplies and said first and second AC power lines, and wherein said service processor determines if said first and second power supplies are operatively connected to the same AC power line.
4. A system according to claim 3, wherein said first AC power line and said second AC power line are connected to different circuit-breakers.
5. A system according to claim 1, wherein said UPS is for notifying said service processor of an impending power failure, and wherein said service processor can perform a controlled shutdown of said at least one system resource when notified of an impending power failure.
6. A system comprising:

a service processor controlled by operating software;  
an uninterruptible power supply (UPS) for supplying AC power and UPS identifying information on a power connection; and  
a plurality of system resources for sensing said identifying information and for sending said identifying information to said service processor;  
wherein said service processor receives and examines identifying information to determine which system resources are connected to said UPS.

7. A system according to claim 6 wherein said identifying information is an IP address.

8. A system according to claim 6 wherein said identifying information is a serial number.

9. A system according to claim 6, wherein at least one system resource includes redundant first and second power supplies, and wherein said service processor determines if said first and second power supplies are both connected to said UPS.

10. A system according to claim 9, wherein said service processor initiates a warning if said UPS connects to both said first and second power supplies.

11. A system according to claim 6, wherein said UPS notifies said service processor of an impending power failure, and wherein said service processor performs a controlled shutdown of system resources connected to said UPS in response to said notification.

12. A system comprising:

a service processor controlled by operating software having power microcode;

an uninterruptible power supply (UPS) for supplying AC power on a power connection, wherein said UPS adjusts said AC power under control of said power microcode;

a plurality of system resources that can sense an out-of-range condition on their power inputs, wherein said power input of at least one system resource is

connected to said power connection, and wherein said plurality of system resources notifies said service processor when an out of range condition occurs; wherein said service processor sends power microcode to said UPS that causes said UPS to produce AC power having an out-of-range condition; and wherein said service processor receives and examines notifications of out-of-range conditions to determine what system resource is connected to said UPS .

13. A system according to claim 12 wherein said power microcode causes said AC power voltage to increase.

14. A system according to claim 12 wherein said power microcode causes said AC power voltage to decrease.

15. A system according to claim 12 wherein said power microcode causes said AC power to turn off.

16. A system according to claim 12 wherein said power microcode causes said UPS to vary said power AC power such that said power AC power achieves an out-of-range condition and then achieves an in-range condition.

17. A system according to claim 16 wherein said service processor correlates power microcode commands and said out-of-range condition and said in-range condition to verify that said power microcode commands caused said out-of-range condition.

18. A system according to claim 12 wherein at least one system resource includes redundant first and second power supplies, and wherein said service processor initiates a warning if said first and second power supplies are both connected to said UPS.

19. A system according to claim 18, further including a first AC power line and a second AC power line, wherein said UPS is connected to said first AC power line; and wherein said second power supply is operatively connected to said second AC power line.

20. A system according to claim 12, wherein said UPS can notify said service processor of an impending power failure, and wherein said service processor can perform a controlled shutdown of system resources connected to said UPS when notified of an impending power failure.